

cylinder long enough to run four hours without changing. The first cylinder, which was twelve inches long and five in diameter, could not be relied upon for more than eight minutes' work; and to run through a session of three or four hours the cylinder must be correspondingly enlarged. By consulting Mr. DABOLL I found that three hours' work would require a length of not less than twenty-three and a half feet. To provide against a longer session I had my cylinder made thirty feet long, running it out of the window near the witness-stand, and providing ropes from the roof with which to sustain its weight. With this arrangement, which, as you will readily perceive, had its drawbacks, I was not perfectly satisfied, but you can scarcely imagine the pride with which I watched its operation, or the high anticipations I entertained of its future usefulness to me. As a test I started it before the term of court at which I expected to first use it, and employed CHARLEY PALMER, who is a good reader, to read the new code for the instrument to "take down," while I watched its operation. The trial was successful in the highest degree, and CHARLEY declared that, if it would stand that, it ought to be able to stand anything.

I ought to mention in this connection that I at once filed a caveat in the Patent Office, broadly covering the use of a cylinder more than a foot in length; or one run out of a window and sustained by guy-ropes or their equivalent.

But this arrangement in reality proved far from satisfactory. It required great care in the adjustment of the foil on the cylinder, and I found that clockwork was not equal to the business. To supply power, I purchased a small steam-engine, and had much difficulty in getting the consent of the authorities to use it; and when consent was at last obtained, I found more difficulty still in the operation of the machinery. It was especially hard to be obliged to pay an engineer out of my own pocket for running the engine. However, I still entertained hopes that in time I should find that my labor had not been altogether in vain, but that I should make it a success and thus be delivered from the drudgery of stenography. Indeed, at the first session of court, where I tried the new arrangement, everything was lovely, and for two weeks everyone was congratulating me on the success of my undertaking. At last, however, there came a change. In the midst of the very last trial in the term, the counsel got into one of those periodical disputes on which I ought to have calculated, and I was called upon to read my notes. I was in a quandary. No man, could ever, by any amount of practice, become able to read at sight the microscopic shades of depth in the continuous line traced upon the foil. Nothing could be done but to turn back the cylinder to the commencement of the trial, and let the machine repeat what it had taken, until the portion of the evidence in question was reached. I tried to hurry it, by putting on more speed, but as soon as that was attempted the voice was trans-

formed into a series of most unearthly screeches. I let it run at the same speed as at first, and sat back waiting for the counsel to tell when the disputed point was reached, for I had become so confused that I had entirely forgotten it. And now came another cause of confusion. While every question and answer had been taken down with the utmost accuracy, every imaginable sound besides seemed to have got into the thing—sounds which had been scarcely noticed during the progress of the trial were reproduced with the most alarming distinctness; and the ears of the court were regaled with the barking of a dog, the crying of a child, the quarreling of the attorneys, and coughing, sneezing, stamping, slamming doors and rumbling of wheels over the pavement outside, and an infinite variety of other sounds. The uproar of laughter which followed this exhibition of the perfection of reporting was sufficient to destroy everything like the dignity of the Court or the decent gravity which should characterize judicial proceedings. I must say, I had never before realized as I then did how necessary a quality in a judge is patience. Lawyers, of course, are not expected to have any,—or, if expected to have any, they *don't*; and the lawyers in that particular case, I am sure will never forgive me for the ridiculous reproduction of the spicy remarks with which they had interspersed the proceedings.

This experience, as you may well imagine, closed my use of the phonograph in Court. But my troubles were not ended; transcripts were ordered in nearly every case tried at that term. I set my copyists at work on them, but it was at once discovered that the machine could not be made to talk at less speed than it was run at when the proceedings were taken. The consequence was, of course, that I was compelled to sit for two mortal weeks reporting in shorthand the trials which I had before so proudly reported with the phonograph.

There is little use in commenting upon these experiments; and the very thought of my disappointment puts me in a frame of mind entirely unsuited to the task. The use of the instrument was abandoned, and it was put out of sight.

I now pass to the recital of more pleasant experiences. After some little time had passed, I again got out my small phonograph, thinking I had struck upon a new and important improvement upon it. After considerable study, and before fully deciding whether my changes in it would be a success, I heard the clock strike the hour of midnight, and I retired to dream over the subject, leaving the instrument upon the table in my library. Early in the morning I again set it running, and was treated to a most marvellous sight. As the cylinder slowly moved along, to my utmost astonishment a number of kittens crawled out of the funnel! Upon investigating the matter, I found that during the night a cat had entered by an open window and attempted to make a lodging place in the funnel, her movements jarring the